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EXAMINER
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CRAIG, DWIN M

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UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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*Ex parte* CHRISTOPHER SQUIRES and CURTIS BRUNER

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Appeal 2016-007564  
Application 14/096,606<sup>1</sup>  
Technology Center 2100

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Before JUSTIN BUSCH, TERRENCE W. MCMILLIN,  
and NORMAN H. BEAMER, *Administrative Patent Judges*.

BEAMER, *Administrative Patent Judge*.

DECISION ON APPEAL

Appellants appeal under 35 U.S.C. § 134(a) from the Examiner's final rejection of claims 1–20. We have jurisdiction over the pending rejected claims under 35 U.S.C. § 6(b).

We reverse.

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<sup>1</sup> Appellants identify HGST Netherlands B.V. as the real party in interest. (App. Br. 2.)

## THE INVENTION

Appellants' disclosed and claimed invention is directed to network interface controller emulation. (Abstract.)

Claim 1, reproduced below, is illustrative of the claimed subject matter:

1. A method of operating a storage subsystem coupled with a host, the method comprising:
  - emulating, to a main processing system on the host, a network connection through an emulated network interface controller (NIC) to a storage volume;
  - receiving, over a bus between the main processing system and the storage subsystem, a data request originated by the main processing system and directed to the emulated NIC that requests access to the storage volume; and
  - providing the main processing system with the access to the storage volume via the emulated NIC as if the storage volume were accessible over the network connection.

## REJECTION

The Examiner rejected claims 1–20 under 35 U.S.C. § 103(a) as being unpatentable over Dube et al. (US 2010/0292982 A1, pub. Nov. 18, 2010) and Tchigevsky et al. (US 2007/0189308 A1, pub. Aug. 16, 2007). (Final Act. 7–11.)

## ISSUE ON APPEAL

Appellants' arguments in the Appeal Brief present the following dispositive issue<sup>2</sup>:

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<sup>2</sup> Rather than reiterate the arguments of Appellants and the findings of the Examiner, we refer to the Appeal Brief (filed Dec. 29, 2015); the Reply

Whether the Examiner erred in finding the combination of Dube and Tchigevsky teaches or suggests the independent claim 1 limitation, “providing the main processing system with the access to the storage volume via the emulated NIC as if the storage volume were accessible over the network connection,” and the commensurate limitations recited in independent claims 8 and 15. (App. Br. 7–8.)

### ANALYSIS

For the limitations at issue, the Examiner relies on the disclosure in Dube of an access controller, including a storage emulation module coupled to a processor in a computer system such that storage media in the access controller appears as if it is local to the computer system. (Final Act. 7–10; Dube Fig. 1, ¶¶ 7, 26, 45.) The Examiner also relies on the disclosure in Tchigevsky of a NIC emulator linking a virtual machine communicating using the Ethernet networking interface to a wireless networking bridge. (Final Act. 10–11; Tchigevsky Fig. 1, ¶¶ 28–29.)

Appellants argue, inter alia, the Examiner errs because Dube is concerned with making storage appear local, whereas the claims are directed to making storage appear as if it were accessible over a network connection. (App. Br. 7.) *I.e.*, “Dube fails to teach or suggest *emulating, to a main processing system on the host, a network connection* through an emulated NIC to a storage volume, as recited by [the claims].” (App. Br. 8.) Appellants further argue Tchigevsky’s teaching of using an emulated network interface controller to emulate a network connection between a

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Brief (filed Aug. 3, 2016); the Final Office Action (mailed June 26, 2015); and the Examiner’s Answer (mailed June 3, 2016) for the respective details.

virtual machine and a wireless network does not teach emulating a bus connection to storage as if over a network. (*Id.*)

In response, the Examiner further relies on the disclosure in Dube of the ability of the access controller to forward input/output requests from the computer system to network-attached storage so as to provide redundancy to the storage media of the access controller. (Final Act. 9; Ans. 7; Dube ¶¶ 45, 56.) However, we agree with Appellants that this aspect of Dube discloses the Access Controller exchanging data with the network-attached storage via a separate network interface controller and an actual network, and thus provides no teaching of providing access to storage via an *emulated* NIC *as if* the storage volume were accessible over the network connection. (App. Br. 8.) We are also not persuaded the Examiner's claim interpretation is reasonable, which would equate *actual* accessing of storage over an *actual* network as satisfying the claim requirement of *emulating* access *as if* via a network. (*See* Final Act. 10.)

In sum, we agree with Appellants that the Examiner does not provide *prima facie* support for the rejections. “[T]he examiner bears the initial burden, on review of the prior art or on any other ground, of presenting a *prima facie* case of unpatentability.” *In re Oetiker*, 977 F.2d 1443, 1445 (Fed. Cir. 1992). On the record before us, we are constrained to find the Examiner errs in rejecting independent claims 1, 8, and 15.

## CONCLUSION

For the reasons stated above, we do not sustain the obviousness rejection of independent claims 1, 8, and 15 over Dube and Tchigevsky. We also do not sustain the obviousness rejections of claims 2–7, 9–14, and 16–

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20 over Dube and Tchigevsky, which claims are dependent from claims 1, 8, or 15.

#### DECISION

We reverse the Examiner's rejections of claims 1–20.

REVERSED